

Market integration of the Malaysian poultry industry: a bound testing approach to co-integration

ABSTRACT

This paper examines market integration by analyzing transmission of price among spatially separated regional wholesale poultry markets in Peninsular Malaysia. Short-run and long-run relationship of wholesale price among regional markets was examined using bound testing approach to co-integration and error correction models. The statistics follows the procedure of Wald or F-statistics in a generalized Dickey-Fuller regression, which is used to test the significance of lagged levels of the variables in a conditional unrestricted Equilibrium Correction Model (ECM). Based on Wald or F-test results of the jointly lag wholesale regional market prices, there exist co-integration among the price series. The value of the F-statistics (4.176) is greater than the upper bound critical values (3.67) at 5% significance level and also significant. Therefore, a long-run equilibrium relationship was found to exist between the regional markets. Results of the pair-wise Granger-causality between regional wholesale markets indicate bidirectional causality between central as terminal market and East-coast market. There is unidirectional South region Granger-cause central wholesale market price like-wise North region market Granger-cause Central market but not on the other direction.

Keyword: Malaysia; Poultry; Market; Co-integration; Autoregressive